



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/922,250	08/06/2001	James J. Kauzlarich	JJK-2	7551
7590	10/03/2005			
George F. Helfrich 162 Shasta Drive Newport News, VA 23608			EXAMINER JONES, HUGH M	
			ART UNIT 2128	PAPER NUMBER

DATE MAILED: 10/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/922,250

Applicant(s)

KAUZLARICH, JAMES J.

Examiner

Hugh Jones

Art Unit

2128

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 8/6/2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-12, 14-17 is/are pending in the application.
- 4a) Of the above claim(s) 12-16 is/are ~~withdrawn~~ *incomplete* from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11, 17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 8/6/2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 12/7/2001.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

### DETAILED ACTION

1. Claims 1-17 of US Application 09/922,250, filed 8/6/2001, are presented for examination.

#### **Claim Rejections - 35 USC § 112**

2. Where applicant acts as his or her own lexicographer to specifically define a term of a claim contrary to its ordinary meaning, the written description must clearly redefine the claim term and set forth the uncommon definition so as to put one reasonably skilled in the art on notice that the applicant intended to so redefine that claim term. *Process Control Corp. v. HydReclaim Corp.*, 190 F.3d 1350, 1357, 52 USPQ2d 1029, 1033 (Fed. Cir. 1999). The term “*electron discharge machine*” in claims 15-16 is used by the claim to mean “electro-discharge machine”, while the accepted meaning relates to high voltage corona generators. The term is indefinite because the specification does not clearly redefine the term.

#### **Unexamined Claims**

3. There appears to missing text in the claims. Claim 12 appears to be incomplete (see bottom of page 18 of the specification). Claim 13, also appears to be incomplete (see top of page 19). Therefore, claims 12, 13 and dependent claims 14-16 have not been examined.

#### **Claim Rejections - 35 USC § 102**

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

Art Unit: 2128

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claim 1 is rejected under 35 U.S.C. 102(b) as being clearly anticipated by Huang et al. (6,004,489).

6. Huang et al. disclose modeling extrusion (col. 11, line 26 to col. 15, line 14) including

- specifying the cross-sectional profile geometry (fig. 9; col. 11, line 52 to col. 12, line 44), constructing a finite element geometry (see col. 13, lines 51-54), constraining the geometry at the edges (col. 11, line 52 to col. 12, line 44); applying pressure to one side of the plate model (fig. 11, col. 13, lines 41-54; col. 14, line 53 to col. 15, line 2); creating a deflection by measuring a deflection of one side of the model (col. 14, lines 19 to col. 15, line 14); calculating a multiplication factor to scale the deflection (col. 14, lines 19-52); calculating a new deflection after applying the factor (col. 14, lines 19 to col. 15, line 14); iterating until the die profile shape is defined (col. 14, lines 19 to col. 15, line 14);
- wherein the model has the mechanical properties of rubber (Huang et al. allow for any material – see 13, lines 6-54); wherein the cross-sectional geometry further comprises internal edges and edge points (col. 11, line 52 to col. 12, line 44; col. 13, lines 51-54); wherein the plate is deflected by no more than the thickness of the plate model (any simulation of an extrusion plate model in a die must inherently be less than the plate thickness or there is no extrusion); using numerically

Art Unit: 2128

controlled machinery/electro-discharge machines to cut the die in a blank (col. 15, lines 15-34).

**Claim Rejections - 35 USC § 103**

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

9. Claims 2-11, 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Huang et al. (6,004,489).

10. As per Claims 2, 17, Huang et al. does not disclose that does not teach that the thickness of the plate model is 10% of the cross-sectional area of the model. At the time of the invention, it would have been an obvious matter of design choice to a person of ordinary skill in the art to use such a ratio because Applicant has not disclosed that the particular scaling factor provides an advantage, is used for a particular purpose, or solves a stated problem. One of

Art Unit: 2128

ordinary skill in the art, furthermore, would have expected Applicant's invention to perform equally well with such a ratio because the choice of scaling depends on the particular problem to be solved and such a scaling would not affect the design disclosed in Huang et al..

11. Therefore, it would have been an obvious matter of design choice to modify Huang et al. to obtain the invention as specified in claim 2, 17.

12. Any inquiry concerning this communication or earlier communications from the examiner should be:

**directed to:**

Dr. Hugh Jones telephone number (571) 272-3781, Monday-Thursday  
0830 to 0700 ET,

**or**

the examiner's supervisor, Jean Homere, telephone number (571) 272-  
3780.

Any inquiry of a general nature or relating to the status of this application  
should be directed to the Group receptionist, telephone number (703) 305-  
3900.

**mailed to:**

Commissioner of Patents and Trademarks  
Washington, D.C. 20231

**or faxed to:**

(703) 308-9051 (for formal communications intended for entry) **or**

(703) 308-1396 (for informal or draft communications, please label  
*PROPOSED* or *DRAFT*).

Art Unit: 2128

Dr. Hugh Jones

Primary Patent Examiner

May 27, 2005

HUGH JONES Ph.D.  
PRIMARY PATENT EXAMINER  
TECHNOLOGY CENTER 2100